## **CLAIMS**

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## What is claimed is:

- 5 1. A method for resolving ambiguity between names and entities through use of an information architecture comprising the steps of:
  - a) providing a plurality of names;
  - b) assigning at least one persistent, uniquely identified, addressable information object to each of said names;
  - c) storing said at least one information object associated with each name in an electronically accessible network to generate an information structure.
  - 2. The method of claim 1, wherein said names comprise biological names.
- The method of claim 2, wherein said biological names comprise taxonomic names.
  - 4. The method of claim 2, wherein said biological names comprise molecule names.
- 5. The method of claim 4, wherein said molecule names are selected from the group consisting of gene names and protein names.
  - 6. The method of claim 2, wherein said biological names comprise cell names.
- 7. The method of claim 1, wherein a content identifier is used to address said information object.
- 8. The method of claim 1, wherein said content identifier is at least one of a Digital Object Identifier (DOI), a Uniform Resource Identifier (URI) or a Uniform Resource Name

  (URN), an Archival Resource Key (ARK), a Persistent Uniform Resource Locator (PURL), a Universal Unique Identifier (UUID), and Life Sciences Identifier (LSID).

- 9. The method of claim 7, wherein said information architecture is accessible over an electronic communication network.
- The method of claim 9, wherein said addressing of said information objects and accessing said information objects is managed by one or more resolution servers or redirection services.
- 11. The method of claim 7, wherein assignment of said content identifiers is managed by a registration agency.
  - 12. The method of claim 2, wherein content of said information objects comprises at least one of metadata, data, and descriptive text, said content representing at least one of a biological Name, Taxon, Nomos, Practitioner, or Exemplar.
  - 13. The method of claim 12, wherein assignment of said content is based on phylogenetic, phenotypic, genotypic, phenetic, genomic, or polyphasic grouping of Exemplars and/or Taxa.
- 20 14. The method of claim 1, further comprising the step of providing a processor configured to provide service software to users accessing said information architecture.

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- 15. The method of claim 14, wherein said service software is configured to route said uses to third party information resources having information related to said information object.
- 16. The method of claim 15, wherein said third party information resources comprise historical and current taxonomic and nomenclatural revisions of said information objects.
- 17. A system comprising a processor and software configured to carry out the method of claim 1.

- 18. A method for providing taxonomic and nomenclatural services, comprising:
  - a) providing biological information objects;

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- b) creating Digital Object Identifiers for said information objects;
- c) making said Digital Object Identifiers accessible in a network; and
- d) routing users and applications, said routing comprising linking to third party resources via a menu delivered to the user via a global DOI directory whenever the user selects a DOI-based hyperlink, to multiple services related to said biological information objects, said multiple services comprising direct and persistent links to a record of historical and current taxonomic and nomenclatural revisions of said biological information objects.